

**U.S. Department of Health and Human Services (HHS)
National Institutes of Health (NIH)
National Institute on Minority Health and Health Disparities (NIMHD)
National Advisory Council on Minority Health and Health Disparities (NACMHD)**

6707 Democracy Boulevard
Bethesda, MD

September 10, 2013
8:00 a.m. – 4:00 p.m.

Meeting Minutes

Council Members Present

John Ruffin, Ph.D., Director, NIMHD
Judith Bradford, Ph.D.
Eddie Greene, M.D.
The Honorable Kweisi Mfume
Valerie Montgomery Rice, M.D.
Lisa Newman, M.D., M.P.H., F.A.C.S., F.A.S.C.O.
Jesus Ramirez-Valles, Ph.D.
Michael A. Rashid, MBA
Raj Shah (*by teleconference*)
Linda Thompson-Adams, Ph.D., R.N., FAAN

Ad Hoc Members

Shavon L. Arline-Bradley, M.P.H.
Brian M. Rivers, Ph.D., M.P.H.
William Robinson, M.D.
Michelle A. Williams, ScD (*by teleconference*)

Ex Officio Members

Robert M. Kaplan, Ph.D.
Gary Martin, D.D.S.

Executive Secretary

Donna A. Brooks

CLOSED SESSION

The first portion of the meeting was closed to the public in accordance with provisions set forth in Sections 552b(c)(4) and 552b(c)(6), Title 5, U.S.C., and Section 10(d) of the Federal Advisory Committee Act, as amended, U.S.C. Appendix 2.

REVIEW OF GRANT APPLICATIONS

Executive Secretary Donna A. Brooks called the Closed Session to order at 8:06 a.m. Dr. John Ruffin, Director of the National Institute on Minority Health and Health Disparities (NIMHD), welcomed the Council members.

Dr. Ruffin led the second level review of grant applications. The Council considered 203 applications requesting an estimated \$40,580,648 in total costs. Applications from the following programs and initiatives were considered: Minority Health and Health Disparities International Research Training Program (MHIRT); Scientific Conference Grants; Small Business Innovation Research (SBIR)/Small Business Technology Transfer Research (STTR); Understanding and Promoting Health Literacy; Basic Social and Behavioral Research on Culture, Health, and Wellbeing; NIH Building Infrastructure Leading to Diversity (BUILD) Initiative; and NIH National Research Mentoring Network (NRMN). All second level review decisions were made through *en bloc* voting.

Ms. Brooks adjourned the Closed Session at 9:00 a.m.

OPEN SESSION

CALL TO ORDER AND WELCOME

Ms. Brooks called to order the Open Session at 9:30 a.m.

OPENING REMARKS AND INTRODUCTIONS

Dr. Ruffin welcomed all participants to the 34th NACMHD meeting, the final meeting for fiscal year 2013. Dr. Jas Ahluwalia, who was unable to attend, has agreed to serve as the new Chair designee of the NACMHD as of the next meeting. Seven new members have been appointed to the Council:

- Linda Thompson Adams, Dean of the College of Health Sciences at West Chester University;
- Judith Bradford, Director of the Center for Population Research in LGBT Health and Co-Chair of The Fenway Institute;
- Eddie Greene, Associate Professor of Medicine in the Division of Nephrology and Hypertension and Director of the Office for Diversity in Education at the Mayo Clinic;
- Lisa Newman, Professor of Surgery and Director of the Breast Cancer Center and the Multidisciplinary Breast Fellowship Program at the University of Michigan;
- Valerie Montgomery Rice, President-Elect and Dean of the Morehouse School of Medicine;
- Michael Rashid, President and CEO of AmeriHealth Caritas;
- Frank Talamantes, Senior Research Scientist for the El Paso Sleep Clinic and Professor Emeritus of Endocrinology at the University of California, Santa Cruz.

CONSIDERATION OF JUNE 2013 MINUTES

Council members unanimously approved the minutes of the June 11, 2013 meeting.

FUTURE MEETING DATES AND ADMINISTRATIVE MATTERS

NACMHD meetings in 2014 are scheduled for February 25, June 10, and September 9.

NIMHD DIRECTOR'S REPORT

Dr. Ruffin presented the 34th NIMHD Director's Report to update the Council on recent activities within NIMHD and across the National Institutes of Health (NIH).

New NIMHD Staff:

- Office of Administrative Management: Sophary Wong and Sharita Brown, budget analysts
- Office of Communications and Public Liaison: Gerda Gallop-Goodman, technical writer/editor
- Division of Data Management and Scientific Reporting: Dr. Scott Nolan, American Association for the Advancement of Science (AAAS) Science and Technology Fellow
- Intramural Research Program: Dr. Kevin Gardner has joined the cancer cluster as an adjunct investigator and acting director of the Basic Science Group; his primary appointment is in the National Cancer Institute (NCI). Dr. Gardner studies molecular linkages between race, obesity, and triple-negative breast cancer. Dr. Madeline Wong is a research fellow in Dr. Gardner's laboratory investigating pathways associated with triple-negative breast pathology. Dr. Liang Yi is a discovery research scientist in the diabetes cluster studying membrane biogenesis, DNA transposition, and immunodeficiency diseases.

NIMHD Program Funding: Based on the Council's second level review of grant applications at the June 2013 meeting, applications for the following NIMHD programs were funded: four scientific conference grants; four SBIR and four STTR grants; and two Research Centers in Minority Institutions (RCMI) grants.

Dr. Ruffin reminded Council members of the need to inform the community about the NIH SBIR/STTR programs. Funds for these programs are set aside in every NIH Institute and Center, including NIMHD, and the community should be encouraged to apply for grants from this funding pool.

Funding Opportunity Announcements:

NIMHD programs and partnerships currently accepting applications are:

- **NIMHD Social, Behavioral, Health Services, and Policy Research on Minority Health and Health Disparities** is soliciting R01 applications for innovative social, behavioral, health services, and policy research that can directly and demonstratively contribute to the elimination of health disparities.
- **NIMHD Basic and Applied Biomedical Research on Minority Health and Health Disparities** is soliciting R01 applications that enhance understanding of the fundamental biological mechanisms involved in disease conditions that disproportionately affect health disparity populations and develop therapies or interventions that can directly or demonstratively contribute to the reduction or elimination of health disparities.
- **NIMHD Clinical Research Centers in Minority Institutions Infrastructure for Clinical and Translational Research (RCTR)** is a limited competition funding opportunity announcement to support the development of infrastructure required for the conduct of clinical and translational research in institutions funded via the RCMI program.

- **Centers of Excellence for Big Data Computing in the Biomedical Sciences** is a trans-NIH initiative in which NIMHD is participating. The NIH Big Data to Knowledge (BD2K) initiative seeks to establish BD2K centers of excellence to conduct research to advance the science and utility of big data in the context of biomedical and behavioral research and to create innovative new approaches, methods, software, tools, and related resources.

More information about these funding opportunity announcements, including submission dates, can be found at <http://www.nimhd.nih.gov> or <http://www.nih.gov/>.

Translational Health Disparities Course: The NIMHD convened its 2013 Translational Health Disparities course on August 5-16 on the NIH campus. Approximately 90 participants were selected from a pool of 450 applicants representing multiple disciplines, backgrounds, geographic locations, and ethnicities. The course focused on the integration of various disciplines—including biological, social, behavioral, physical, and environmental sciences, law, and economics—to understand the translation of science, practice, and policy issues when addressing health disparities. For the first time, the course offered continuing education credit to eligible participants, physicians, and other health professionals through the Johns Hopkins University CME office. Dr. Ruffin thanked NIMHD staff and faculty from across the country who presented the course under the leadership of Dr. Irene Dankwa-Mullan.

NIH Reproducibility Initiative: NIH is examining the development of initiatives to address the reproducibility and transparency of research findings. The challenge has been the inability to replicate data produced by others or the inability to identify research resources, such as datasets, methods, materials, or digital tools, used in published studies. An *ad hoc* group charged with studying this issue developed guiding principles to address this issue: (1) raise community awareness; (2) enhance formal training; (3) improve the evaluation of applications; (4) protect the integrity of science by adoption of more systematic review processes; and (5) increase the stability of investigators. Recommendations for how NIH can address the issue include obtaining the input of stakeholders, such as the Advisory Councils. In addition, pilot projects and training events will be pursued, including evaluation of the scientific premise of applications, guidelines or checklists to evaluate applications, and support for replication studies. Council members were provided detailed information on this initiative and were invited to provide feedback to NIMHD staff.

NIH Budget: NIH issued a fact sheet that summarizes the impact of the federal budget sequestration: <http://www.nih.gov/news/health/jun2013/nih-03.htm>. The sequester is delaying progress on medical breakthroughs and having negative consequences for the scientific workforce that depends heavily on NIH grant funding. Compared with 2012, approximately 700 fewer competitive research project grants will be awarded by the agency in fiscal year 2013. Also in 2013, the NIH Clinical Center will admit approximately 750 fewer new patients, and stipends for National Research Service Award participants will not be increased. If the budget stays on its current course, NIH-supported research will lose nearly \$19 billion over the next 10 years.

The Council discussed the impact of sequestration on the emerging field of minority health and health disparities research just as it has gained traction as an independent area of academic endeavor and as underrepresented minority students are being encouraged to enter the health and sciences fields. The challenge is to communicate that this field is not just one of interest but is a priority for the nation.

Priority Setting and Strategic Planning: Dr. Ruffin sought the Council's advice and ideas to help set priorities within the Institute and the agency as a whole with the resources that are available.

Members discussed the importance of training courses to promote leadership and collaboration within the minority health and health disparities research community. One suggestion was a potential collaboration with the Association of American Medical Colleges (AAMC) on workshops and trainings, such as their Discovering the Leader Within You leadership development course for postdoctoral fellows and graduate students. The Robert Wood Johnson Foundation was suggested as another potential partner for leadership development events. The Council discussed the possibility of presenting the Translational Health Disparities Course through other vehicles such as webcast. Some however did not want to lose the in-person format which provides the opportunity for interpersonal interaction and fosters direct communication among scientists from diverse disciplines, community-based organization staff, and NIH program staff. Holding regional conferences was suggested as a strategy to expand the course while maintaining interactivity.

Council members discussed the potential for capacity-building around advocacy that would help communities speak for themselves, recognizing that NIMHD cannot engage in advocacy efforts. Members discussed the potential role of grantee organizations.

Additional topics of discussion included the potential for leveraging resources with other federal agencies such as the Agency for Healthcare Research and Quality (AHRQ) on areas of common interest was discussed. NIMHD co-chairs the Federal Collaboration on Health Disparities Research (FCHDR), which includes representation from nearly all executive departments of the federal government and the various HHS agencies. The group focuses on partnership and collaboration to address health disparities issues in ways that each agency or department would not be able to accomplish independently. The FCHDR and the NIH Health Disparities Strategic Plan were suggested as potential avenues through which such collaborations could be created.

SCIENTIFIC PRESENTATIONS

Behavioral and Social Sciences Research on Health Disparities

Robert M. Kaplan, Ph.D., is the NIH Associate Director for Behavioral and Social Sciences and Director of the Office of Behavioral and Social Sciences Research (OBSSR). He presented research findings on health outcome differences between the United States and other developed countries.

Among wealthier countries, life expectancy is no longer related to national per capita income. The OBSSR and other NIH Institutes and Centers sponsored studies by the National Research

Council to investigate this observation. Among determinants of how long people live, medical care has a relatively small impact, approximately 10 percent. Behavioral issues, particularly tobacco and alcohol use, and social circumstances collectively account for 55 percent of the variation in health outcome. Compared to other countries, the United States ranked 12th in life expectancy for a 50-year-old woman in 1955 and 50th in this category in 2010, despite a substantial increase in life expectancy for women around the world over that time period.

A study released in early 2013 (http://www.nap.edu/catalog.php?record_id=13497) compared the United States to 16 other developed countries, mostly in Western Europe in addition to Australia, Japan, and Canada. The United States was second to last in terms of mortality from non-communicable diseases and had the fourth highest death rate for infectious diseases. The U.S. HIV rate was third highest, with an incidence rate of 122 per million, about nine times the average of the other countries. For life expectancy at birth in 2007, U.S. men ranked lowest and U.S. women ranked second lowest among men and women in the 17 countries. Conditions associated with shorter life expectancies for people age 50 and older included being overweight, diabetes, hypertension, heart disease, myocardial infarction, and stroke, among other conditions.

U.S. men and women are at the bottom among the countries in terms of years of life lost prior to age 50, as well as for infant mortality. In contrast, the United States is ranked highest for life expectancy among people over age 80. Mortality prior to age 50 may be associated with a number of indicators for which the United States ranked poorly, including adolescent health issues (e.g., teen pregnancy, sexually transmitted diseases, childhood obesity, and diabetes), the homicide rate, the rate of suicide using a firearm, injuries (including motor vehicle crashes), individual behaviors (including civilian ownership of firearms, lack of seat belt use, lack of helmet use on motorcycles), and social factors (e.g., income inequality, relative poverty). Overall, for deaths before age 50 among men, homicide is the number one cause of death, followed by transportation-related injuries. For women, non-communicable diseases are the leading cause of death before age 50.

A 2012 report from the Institute of Medicine recommended that the Secretary, HHS, should set national goals on life expectancy and per capita health expenditures that will bring the United States to average levels among wealthy countries by 2030. Based on current rates, U.S. men are 2.37 years below and U.S. women are 2.17 years below the average life expectancy among the 17 countries in the study. By itself, increasing medical care (e.g., regular mammograms, smoking cessation, normalizing cholesterol levels and weight) is unlikely to bridge the gap in life expectancy between the United States and other countries. On average, other countries spend approximately 10 percent of gross domestic products on healthcare compared to 17 percent in the United States. Reducing U.S. healthcare spending to the average level would save \$1.1 trillion per year.

One predictor of long life expectancy is education. However, U.S. preschool enrollment is low in relation to the other wealthy countries, and the high school graduation rate is low and declining. People with less than a high school education lose about 20 percent of their life expectancy, and those with an M.D. or Ph.D. gain about 50 percent in relation to the median. A variety of behavioral indicators are related to education, such as current smoking, body mass index, engagement in vigorous activity, and number of drinks per day. Other countries, including

Singapore and South Korea, have invested strongly in public education, and their life expectancies have increased in parallel.

A poll conducted after the 2013 study was published showed that people in the United States have low awareness that the nation has lower life expectancies, higher infant mortality, a higher obesity rate, or a higher homicide rate than other wealthy countries. The Council discussed the need for increasing awareness of the disproportionate impact of violence and guns on people in minority communities.

The Weight of Pain and Health Disparities Among Individuals With Chronic Abdominal Pain

Bridgett Rahim-Williams, Ph.D., M.P.H., is an NIMHD Disparities Research and Education Advancing our Mission (DREAM) fellow. Her primary research interests include laboratory, clinical, and community-based participatory interventions to investigate comorbid conditions, such as HIV and pain, HIV and diabetes, and AIDS-associated malignancies, as well as the culture and language of pain and disparities and the cross-cultural clinical treatment of pain.

Pain has multiple dimensions, including biological, psychological, and sociocultural. Pain and pain health disparities research seeks to improve knowledge on pain across cultural groups and to improve the characterization of chronic pain—pain that individuals experience for longer than 6 months. Researchers are addressing the need for real-time assessment of pain that considers both subjective and objective measures, in order to fulfill the unmet clinical need for measures that accurately estimate pain. Abdominal pain can be mild and intermittent or severe and continuous. Pain can disrupt health-related quality of life, can develop after a chronic or an acute condition, and may have genetic links.

Pain research is promoted by the Health Reform Act of 2010 and the NIH Pain Consortium, which includes NIMHD and other NIH Institutes and Centers. The Secretary, HHS, through the Institute of Medicine, will hold a conference on a pain research coordinating committee. The Joint Commission sets standards for pain assessment and pain management.

In a study of pain and health disparities among individuals with chronic abdominal pain, a test solution of lactulose, sucrose, sucralose, and mannitol was used to experimentally induce abdominal pain in subjects. Pain was assessed with the gastrointestinal pain pointer (GIPP), the McGill Pain Questionnaire, and objective measurements (e.g., heart rate, blood pressure, skin temperature, and 24-hour monitoring of variability). This pilot study was conducted as part of the Brain-Gut Natural History Study of the National Institute of Nursing Research. The study aimed to (1) identify group differences in response to experimentally induced pain that predict patient-related clinical outcomes and (2) identify the factors and describe relationships contributing to increased pain intensity among patients who were already experiencing chronic abdominal pain, as well as healthy control subjects. The study has enrolled men and women between the ages of 13 and 45, including those with chronic abdominal pain and those without a history of that condition. Subjects were categorized as normal weight or overweight. Currently, 93 subjects have been enrolled, comprising 54 women (58 percent), 50 percent non-Hispanic whites, 27 percent African Americans, and a group of Latino, Asian, and American Indian individuals.

Several key findings have emerged from the study. Evidence was found of a significant interaction effect of weight by maximum pain. Overweight individuals who reported pain after ingesting the test solution had higher pain scores rated by pain intensity than normal weight individuals. A significant additive effect of race/ethnicity, age, and gender/sex was observed when those factors were added to a model with weight. The observed differences could result from differences in pain modulatory mechanisms, inflammation, interactions between inflammation and weight, and sociocultural effects.

Dr. Rahim-Williams is continuing recruitment for the study in order to further explore differences by demographic factors, as well as interactions among them, and assist in extrapolating findings to the general U.S. population. Other future goals are to: examine the interface of ethnic identity, genetic markers, and biological genetic mechanisms underlying group differences; investigate cultural language descriptors of pain, pain intensity ratings, and the treatment of pain; and continue testing novel, innovative, and culturally responsive behavioral interventions for pain management.

Dr. Rahim-Williams discussed challenges for recruiting individuals from diverse backgrounds into the study. Often, minority individuals did not meet the inclusion criteria for the study due to comorbid conditions. In addition, she suggested that increased community awareness of studies would assist with recruitment, as well as working directly with communities to collaborate in the design of research studies and to overcome the stigma associated with research participation. The Council suggested that the intramural research program could partner with RCMIs on multicenter trials to improve enrollment of diverse cohorts.

Developmental Programming of Hypertension in African American Males

Debbie S. Barrington, Ph.D., M.P.H., is a recipient of the NIMHD DREAM Career Transition Award and a Senior Research Fellow in the NIMHD Intramural Research Program. Her research focuses on the social epidemiology, nativity status differential, and cardiovascular risk factors among black Americans, the interplay between socioeconomic position, reproductive and cardiovascular health over the life course, and the role of these interactions in production and reproduction of racial and ethnic health disparities within and across generations.

Approximately one-third of American adults have hypertension, which increases risk of cardiovascular disease, heart attack, heart failure, stroke, kidney disease, and vision and memory loss. Higher rates of hypertension have been documented in African Americans since 1930. Hypertension develops at an earlier age among African Americans compared to whites. African Americans are less likely to have hypertension that is under control, despite having similar rates of awareness of their condition, diagnosis, and treatment, and have a higher prevalence of complications. Hypertension is influenced by biological, nutritional, behavioral, lifestyle, psychological, social, and socioeconomic risk factors.

Dr. Barrington investigated social familial influences, particularly effects on blood pressure that begin in childhood. Racial differences in adult blood pressure can begin as early as age 9. In European populations, an independent association of childhood socioeconomic position with adult blood pressure and hypertension has been established.

The Howard University Family Study is a 2001-2008 family study of black Americans in D.C. that examined the genetic basis of common traits, such as hypertension, obesity, and associated cardiovascular disease phenotypes. Data from this study showed that African-American men who lived with both parents during childhood had a 4.4 mmHg decrease in systolic blood pressure compared to those who never lived with both parents. Men who lived with both parents during the early childhood years, from ages 1-12, had 6.5 mmHg lower systolic blood pressure. Men who lived with both parents from ages 1-12 had a 46 percent decrease in the odds ratio for hypertension compared to men who did not. No association was found for diastolic blood pressure or between living with both parents and blood pressure for African-American women.

The Pitt County study is a 1988-2001 community-based epidemiological prospective cohort study of African Americans in Eastern North Carolina that investigated risk factors for hypertension. African-American men who resided in a two-parent household during childhood had 26 percent lower odds of hypertension compared to men who did not, after adjusting for childhood socioeconomic position. Any change in guardianship during childhood (i.e., before age 18) was associated with 64 percent increased odds of hypertension among men who had a guardianship change compared to those who had stability. No significant associations were found for African-American women.

Dr. Barrington looked for interactions between childhood social familial factors and genetic variants associated with systolic blood pressure and hypertension. A significant interaction was identified between a single nucleotide polymorphism (SNP), RS2183737, and the odds of hypertension or systolic blood pressure associated with living with both parents. This SNP is located in a DNA region that is rich in epigenetic modification. Moreover, this SNP is highly differentiated in ancestral populations, being present in individuals of African descent but not in those with European or Asian ancestry.

Insights into the association between childhood family structure and hypertension could be derived from animal models. In Long-Evans rats, maternal grooming of offspring at the beginning of life affects cognitive, emotional, and sexual behavioral development, as well as hypothalamic pituitary renal stress reactivity. Offspring who are groomed more are able to handle stress better at older ages. In this model, mothers groom their male offspring more than their female offspring. In California mice, both parents participate in early life care of the offspring, which enhances offspring survival. Paternal care is associated with learning and memory in male offspring.

The potential for evolutionary conservation of parental involvement in the health and well-being of male offspring through gene-environment interactions is an ongoing focus of Dr. Barrington's research.

CLOSING REMARKS

Dr. Ruffin reiterated the importance of the Council's input and feedback on the NIH Health Disparities Strategic Plan which would be discussed in more detail at the next meeting. He thanked Council members and the NIMHD staff for their participation in the meeting.

ADJOURNMENT

We hereby certify that, to the best of our knowledge, the foregoing minutes are accurate and complete.

/ John Ruffin /

John Ruffin, Ph.D., Director, National Institute on Minority Health and Health Disparities, NIH

/ Donna A. Brooks /

Donna A. Brooks, Executive Secretary, National Institute on Minority Health and Health Disparities, NIH